

The following claims are presented for examination:

Claim 1. (withdrawn) An apparatus comprising:

a first transistor having a gate, a source, and a drain;

a second transistor having a gate, a source, and a drain, wherein the gate of said second transistor is electrically connected to the gate of said first transistor, and wherein the source of said first transistor is electrically connected to the source of said second transistor;

a first resistor having a first terminal and a second terminal, wherein the first terminal of said first resistor is electrically connected to the drain of said first transistor;

a first capacitor having a first terminal and a second terminal, wherein the first terminal of said first capacitor is electrically connected to the drain of said first transistor;

a second resistor having a first terminal and a second terminal, wherein the first terminal of said second resistor is electrically connected to the drain of said second transistor; and

a second capacitor having a first terminal and a second terminal, wherein the first terminal of said second capacitor is electrically connected to the drain of said second transistor.

Claim 2. (withdrawn) The apparatus of claim 1 wherein the second terminal of said first capacitor is electrically connected to ground, and wherein the second terminal of said second capacitor is connected to ground.

Claim 3. (withdrawn) The apparatus of claim 1 wherein the source of said first transistor is electrically connected to a positive voltage.

Claim 4. (withdrawn) An apparatus comprising:

a first transistor having a gate, source, and a drain, wherein said gate of said first transistor is electrically connected to said drain of said first transistor;

a second transistor having a gate, source, and a drain, wherein said gate of said second transistor is electrically connected to said drain of said second transistor, and wherein said source of said second transistor is electrically connected to drain of said first transistor;

a third transistor having a drain, gate, and source, wherein said gate of said third transistor is electrically connected to said drain of said third transistor, and wherein said source of said third transistor is electrically connected to said drain of said second transistor; and

a capacitor having a first terminal and a second terminal, wherein said first terminal of said capacitor is electrically connected to said drain of said second transistor.

Claim 5. (withdrawn) The apparatus of claim 4 wherein said first transistor is a PMOS transistor, wherein said second transistor is a PMOS transistor, and wherein said third transistor is a PMOS transistor.

Claim 6. (withdrawn) The apparatus of claim 4 wherein the first terminal of said capacitor is electrically connected to a bias input terminal of a bandgap reference voltage generator.

Claim 7. (currently amended) An apparatus comprising:

a bandgap reference voltage generator having an output terminal;

an operational amplifier having a positive input terminal, a negative input terminal, and an output terminal, wherein the negative input terminal of said operational amplifier is electrically connected directly to the output terminal of said bandgap reference voltage generator without intervening elements;

a transistor having a gate, a source, and a drain, wherein the gate of said transistor is electrically connected directly to the output of said operational amplifier without intervening elements, and wherein the drain of said transistor is electrically connected directly to the positive input terminal of said operational amplifier without intervening elements;

a voltage divider having a input terminal, an output terminal, and a common terminal, wherein said input terminal of said voltage divider is electrically connected directly to the positive input terminal of said operational amplifier without intervening elements;

a startup network having a first positive supply terminal and an output terminal, wherein said output terminal of said startup network is electrically connected directly to said input terminal of said voltage divider without intervening elements; and

a self-biasing network having a second positive supply terminal, a common terminal, and an output terminal, wherein said second positive supply terminal of said self-biasing network is electrically connected directly to said output terminal of said startup network without intervening elements, and wherein said common terminal of said self-biasing network is electrically connected directly to said common terminal of said voltage divider without intervening elements.

Claim 8. (original) The apparatus of claim 7 wherein said transistor is a PMOS transistor.

Claims 9 and 10. (canceled)

Claim 11. (currently amended) The apparatus of claim 7 wherein said bandgap voltage reference generator also comprises a bias terminal, and wherein said output terminal of said self-biasing network is electrically connected directly to the bias terminal of said bandgap voltage reference generator without intervening elements.

Claim 12. (currently amended) The apparatus of claim 7 wherein said operational amplifier also comprises a bias terminal, and wherein said output terminal of said self-biasing network is electrically connected directly to said bias terminal of said operational amplifier without intervening elements.

Claim 13. (currently amended) The apparatus of claim 7 wherein said bandgap reference voltage generator further comprises a positive supply terminal and a common terminal, and wherein said operational amplifier also comprises a positive supply terminal and a common terminal, and wherein said positive supply terminal of said bandgap reference voltage generator is electrically connected directly to said positive supply terminal of said operational amplifier without intervening elements, and said common terminal of said bandgap reference voltage generator is electrically connected directly to said common terminal of said operational amplifier without intervening elements.

Claim 14. (currently amended) The apparatus of claim 13 wherein said common terminal of said voltage divider is electrically connected directly to said common terminal of said operational amplifier without intervening elements.

Claim 15. (currently amended) The apparatus of claim 13 wherein said positive supply terminal of said startup network is electrically connected directly to said positive supply terminal of said operational amplifier without intervening elements.

Claim 16. (currently amended) The apparatus of claim 13 wherein said source terminal of said transistor is electrically connected directly to said positive supply terminal of said operational amplifier without intervening elements.

Claim 17. (currently amended) The apparatus of claim 14 wherein said bandgap reference voltage generator further comprises a first capacitor having a first terminal and a second terminal, wherein:

 said first terminal of said first capacitor is electrically connected directly to said output terminal of said bandgap reference voltage generator without intervening elements; and

said second terminal of said first capacitor is electrically connected directly to
 said common terminal of said bandgap reference voltage generator
 without intervening elements.

Claim 18. (currently amended) The apparatus of claim 17 wherein said operational amplifier further comprises a second capacitor having a first terminal and a second terminal, wherein:

 said first terminal of said second capacitor is electrically connected directly to
 said negative input terminal of said operational amplifier without
 intervening elements; and
 said second terminal of said second capacitor is electrically connected directly
 to said common terminal of said operational amplifier without
 intervening elements.

Claim 19. (currently amended) The apparatus of claim 18 wherein said voltage divider further comprises a third capacitor having a first terminal and a second terminal, wherein:

 said first terminal of said third capacitor is electrically connected directly to
 said output terminal of said voltage divider without intervening
 elements; and
 said second terminal of said third capacitor is electrically connected directly to
 said common terminal of said voltage divider without intervening
 elements.

Claim 20. (currently amended) The apparatus of claim 19 wherein said self-biasing network further comprises a fourth capacitor having a first terminal and a second terminal, wherein:

 said first terminal of said fourth capacitor is electrically connected directly to
 said output terminal of said self-biasing network without intervening
 elements; and
 said second terminal of said fourth capacitor is electrically connected directly
 to said common terminal of said self-biasing network without
 intervening elements.